



DEPARTMENT OF HEALTH & HUMAN SERVICES

REGION III ATSDR

Public Health Service
Agency for Toxic Substances
and Disease Registry

88 APR -7 PM 3:28

Memorandum

Date April 6, 1988

From Toxicologist,
Emergency Response Branch, OHA

Subject Health Consultation: Tolerico Well Water, Valmont Site, West Hazelton,
Luzerne County, Pennsylvania

To Mr. Charles Walters
Public Health Advisor
EPA Region III
Philadelphia, Pennsylvania
Through: Chief, Emergency Response Branch *EKG*

4/11/88 FAX → Dave W.C.
4/12/88 → Hand Copy → "
" " → R. R. R.

Statement of the Problem

The Environmental Protection Agency (EPA) has requested that the Agency for Toxic Substances and Disease Registry (ATSDR) determine health implications from the presence of two volatile organic compounds (VOC) in Mr. Tolerico's well water.

Discussion

On October 30, 1987, 1,1,1-trichloroethane (TCA) and perchloroethene (Perc) were detected in Mr. Tolerico's well water at 1.3 ppb and 34 ppb, respectively. Follow-up sampling on December 11, 1987 found that TCA has increased slightly to 9 ppb while Perc has decreased to 6 ppb. ATSDR has been informed that Mr. Tolerico does not use his well, which supplies his service station, for drinking water purposes, but does use the well water to wash his hands. EPA has published several guidelines for drinking water contaminants. The Maximum Contaminant Level (MCL) for TCA in a public drinking water supply is 200 ppb. In addition, EPA's Drinking Water Equivalent Level (DWEL) for a lifetime exposure which will not result in any adverse health effects for TCA is 1,000 ppb. The level in Mr. Tolerico's service station water is well below these guidelines. EPA's DWEL for Perc of 500 ppb is substantially higher than Mr. Tolerico's current well water level of 6 ppb; therefore, adverse, noncarcinogenic health effects are not likely to result from consumption or hand washing using this water. While Perc has been shown to be a weak carcinogen in rodents, the combination of low levels and the infrequent, if any, use of this water for drinking purposes will not lead to an increased risk for the development of cancer. Mr. Tolerico will not develop cancer nor is he likely to experience any health affects from washing his hands in this water.

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Conclusion

Present use of this water for washing hands and occasional drinking purposes does not present a public health threat. If it is likely that this water will be used in the future for drinking purposes, EPA should continue to monitor the water for VOC levels on a periodic basis to ensure that concentrations do not exceed acceptable standards.

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